

In the Specification:

Please amend the specification as shown:

Please delete paragraph [0055] and replace it with the following paragraph:

[0055] As mentioned before, selective cleavage at aspartic acid residues has been observed in the gas phase previously, indicating that acid/base chemistry may provide an alternate route for cleaving peptides in the gas phase (Tsaprailis et al (2000) *Int. J. Mass Spectrom.* 195/196:467; Tsaprailis et al. (1999) *J. Am. Chem. Soc.* 121:5142; Lee et al. (1998) *J. Am. Chem. Soc.* 120:3188). Compound **2** was designed based upon this premise. Compound **2** contains two 18C6 ethers linked by benzoic acid. Deprotonation of the acid is assisted by favorable electrostatic interactions upon complexation with two protonated lysine residues. The ESI mass spectrum for a solution of compound **2** and KKKK (**SEQ ID NO: 8**) demonstrated excellent recognition. The doubly charged adduct $[2 + \text{KKKK} + 2\text{H}]^{2+}$ formed the base peak in the spectrum. Collisional activation of this peak resulted primarily in dissociation of the complex. However, there were additionally two peaks corresponding to the loss of water and the N-terminal lysine. To verify that this chemistry was initiated by the benzoic acid, an additional experiment was conducted where the acid was converted to a methyl ester (compound **3**). The results were nearly identical as for compound **2**, suggesting that compound **2** is merely a spectator adduct, which was sufficiently strongly bound to remain attached after a covalent bond cleavage has occurred but did not directly affect the cleavage process, i.e., did not initiate the cleavage of the N-terminal lysine.